

RANDOM NOTES OF AN ARIZONA FIELD
COLLECTOR.

ON SOME POLYCESTINI (COLEOPTERA—BUPRESTIDAE), WITH
DESCRIPTION OF A N. SP. OF ACMAEODERA.

BY D. K. DUNCAN, Globe, Arizona.

Chrysophana placida Lec.

It is interesting to note that the coloration of this more or less common western borer varies greatly with locality. This insect can be taken in large numbers in the heavily forested areas of Arizona, especially around the lumber camps as at McNary, in the White Mt. district, on freshly-cut logs of *Pinus ponderosa* (western yellow pine), but is invariably a solid bright green color. I have never taken specimens in Arizona that show the various shades of rainbow tints of those from the Pacific Northwest districts.

I have also taken this insect in the Sierra Ancha Mts. of Central Arizona where it was bred from peeled logs of *Pinus ponderosa*, used in a log cabin, evidently peeling the logs is no assurance to keeping the boring pests out?

Polycesta arizonica Schffr.

A few of these insects were bred from large (*Quercus* sp?), white oak trees in the Chiricahua Mts. of Southeastern Arizona. Many larvae were noted, dead insects which had apparently hibernated, and altogether much damage done to the larger oak trees in this area during the spring of 1932. Mature specimens of this insect were also taken on *Prosopis velutinus* (mesquite), in the Baboquivari Mts., Pima County, Arizona, in August, 1932.

Acmaeodera cuprina Spin.

Dr. Horn in his "Revision of the Species of the Acmaeodera of the U. S." in Trans. Amer. Soc., VII, Jan., 1878, expressed doubt as to the validity of locality of this insect, and H. C. Fall in "On American Species of Acmaeodera" in Journal of the N. Y. Ento. Soc. (Vol. VII, March, 1899), calls attention to the fact that no examples of this insect were reported from North America, north of Mexico, and stated that it was doubtful if this insect should be retained in a list of our fauna. I wish to state that *cuprina* is found well within the borders of Arizona. I have in my cases a series of four labelled "Santa Catalina Mts., Pima

County, Arizona, Aug., 1930" and collected by students of the University of Arizona at Tucson. Also I personally collected some dozen specimens on August 14th, 1932, in the Santa Rita Mts., Pima County, Arizona, they were not common, but single specimens were taken here and there between Madero or White House Canyon and the summit, over a wide range of country. All were feeding on a small flower belonging to the daisy group and were all taken over the 5000 feet elevation mark. The Santa Rita Mts. are about forty miles north of the Mexican border.

Acmaeodera flavomarginata Gray.

Southern Arizona should be added to list of localities on this insect, several being taken by myself on Aug. 18th, 1932, on west side of the Baboquivari Mts., Pima County, Arizona, at an elevation of between 3500 and 4000 feet.

Acmaeodera delumbis Horn.

This insect was placed as a synonym of *Acmaeodera gibbula* by H. C. Fall in his "On American Species of *Acmaeodera*" in Journal of N. Y. Ent. Soc. (Vol. VII, March, 1899.)

After a careful study of many specimens of both *gibbula* and *delumbis* I must reach the conclusion that *delumbis* is at least a valid variety if not a good species. *Delumbis* occurs in the early part of June and *gibbula* does not appear before middle July and is not at the peak of emergence until around the first of September, by the time *gibbula* appears the type *delumbis* is practically gone. My examination of thousands of specimens of *gibbula* show no connecting links in the matter of markings, always having the series of three red spots down the sides of each elytron, while *delumbis* is always devoid of any such spots, no *gibbula*s have been noted with less than the three red spots which should be the case if the two were variants of each other. *Delumbis* is not nearly as common as *gibbula* and does not necessarily appear in the same place where *gibbula* later appears nor do *delumbis* apparently ever associate with the *gibbula* types in the few places where both types have been observed at the same time. It is my personal opinion that *delumbis* is a valid species although so close structurally that it would be practically impossible to separate from *gibbula* on any character except the absence of the red spots on the elytra. Only tests of breeding will prove this point. In the meantime I would suggest that *delumbis* be restored as a varietal form of *gibbula* and given the Leng's Catalog number of 9219a.

Acmaeodera angelica Fall.

Central Arizona should be added to localities on this insect, many specimens being taken by myself over a period of years in the foothills of the Pinal Mts., Gila County, Arizona.

Acmaeodera lincipicta Fall.

Since Mr. Fall described this new species from two examples, twenty-nine more specimens have been taken by me, twenty-six of them in the hills above San Carlos Lake, Gila Co., Arizona, which was the type locality, one some twelve miles northeast of Globe, and two at Oracle, Arizona, which is on the northern slope of Mt. Lemon, in the Santa Catalina Mts. All of these specimens run absolutely true to type with no variations except size. This would tend to dispel any doubt that this is not a valid species, also that it is distributed through Central Arizona being however more or less rare, taken around 4500 feet elevations and very early in the spring, April and May.

Acmaeodera papagonis n. sp.

Closely related to the *pulchella-lucia-obtusa* group, nearer to *lucia*, which species it should follow in the list and from which it is difficult to separate structurally. Lateral thoracic spot has been present in examples examined. It can be separated from *lucia* at once by the elytral markings which are very distinct. The ground color is bluish black and very heavy, while the light markings are much more delicately drawn than in *lucia* and consist of four bands across the elytra and placed as follows: top pair starting at scutellum and running thence to sides of elytra at an approximate 30 degree angle, a pair of medial bands running across elytra almost horizontally and two more pairs of bands spaced each about one-third way between medial bands and apex of elytra, these two pairs of bands running about the same angle as the top bands, tip of elytra with two tiny spots and several other indistinct spots scattered about near tips of elytra, these markings are more smooth and uniform in appearance from *lucia* and the bluish black ground color is quite different.

Type: Length 10.3 mm., width 3.7 mm., in my collection.

Paratype: Length 7.2 mm., width 2.6 mm., in my collection

Paratype: Length 9.1 mm., width 3.2 mm., in collection of Mr. H. C. Fall, who has kindly examined the specimens.

Paratyndaris olneyae Skinner.

This species observed emerging from *Prosopis velutinus* (mesquite) at San Carlos Lake, Gila Co., Arizona, and also at Santa Rita Mts., Pima Co., Arizona.

Paratyndaris barberi Skinner.

Reported as hatched from a species of wood known as "iron-wood" by students of the University of Arizona at Tucson, Ariz.

NOTES ON ACTIAS LUNA AND ITS VARIATIONS.

BY CHARLES RUMMEL, Newark, N. J.

For several years an attempt was made to raise another brood of lunas from the Summer brood, which in reality is only a partial second brood. Out of the cocoons obtained from the adults hatched in June none would hatch in some years and varying amounts from one to fifty per cent would hatch in other years. It was observed that the larvae obtained from this summer form were different and much handsomer than the earlier ones, the larvae of the early summer brood being a uniform green, while the late Summer or second brood of larvae would be ornamented with crimson red tubercles all over. Those larvae were fed up to the last stage for several years but no cocoons were obtained. As the weather became cool at the beginning of October, the larvae usually died without spinning their cocoons. In 1931 a female with the pink edge on the outer margin hatched. This was tied out and it became mated with a green form. Those larvae were reared, all of which were adorned with those red tubercles. A few of the cocoons were kept for observation and breeding. In 1932 another female with the pink edge was tied out. In this case a male that also had the pink edge became mated with it. All the larvae from these parents had those crimson red tubercles. About 150 cocoons were obtained from this brood of larvae. The final aim of this experiment is to completely isolate this pink edge variety which Mr. Davis called *rubromarginata*, so it can be bred independent of its typical form *luna*.